

## **Keith Curley**Director of Government Affairs

November 8, 2010

The Honorable Lisa P. Jackson Administrator U. S. Environmental Protection Agency Water Docket, Mailcode: 28221T 1200 Pennsylvania Ave., NW Washington, DC 20460

Re: Chesapeake Bay TMDL – Docket no. EPA-R03-OW-2010-0736

Dear Administrator Jackson:

I am writing on behalf of Trout Unlimited to express our support for finalizing and implementing the Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL would require reductions in nitrogen, phosphorous and sediment pollution flowing to the Chesapeake Bay. The health of the Chesapeake Bay is dependent upon a steady source of clean, cold water from its headwater streams. The TMDL will help reduce pollution throughout the Chesapeake Bay watershed, including headwater areas where water quality improvements will benefit native brook trout and other wild trout.

Trout Unlimited's mission is to conserve, protect and restore North America's trout and salmon fisheries and their watersheds. Trout Unlimited has more than 10,000 members living in the Chesapeake Bay watershed and a long history of grassroots habitat restoration work in the Bay's headwater streams. On average, each Trout Unlimited chapter contributes more than 1,000 volunteer hours working with government agencies, private landowners, local schools, and others in their communities to improve rivers and streams though clean-up days, tree plantings and other activities.

Throughout the 64,000 square mile Chesapeake Bay watershed, hundreds of mountain streams and valley spring creeks provide habitat for native brook trout and contribute clean, cold water to the Chesapeake Bay. However, the same pollutants that plague the Chesapeake Bay impair trout habitat in the headwaters. Nutrient pollution fuels algal blooms, which deprives the water of dissolved oxygen. Reductions in dissolved oxygen negatively affects trout, a species that requires relatively high amounts of dissolved oxygen to survive.

Sedimentation also has serious impacts on trout habitat. Brook trout are highly reliant on clean substrate for spawning and rearing, and a great deal of their decline is due to increased sedimentation and water temperatures. Increased sediment loads can cause fish mortality by "clogging gills and opercular cavities" and also create distributional changes such as "avoidance

<sup>&</sup>lt;sup>1</sup> Eastern Brook Trout Joint Venture, Status and Threats. Available at http://www.easternbrooktrout.org/docs/brookiereportfinal.pdf.

behavior, reduced feeding and growth, respiratory impairment, and general physiological stress that can lead to a reduced tolerance to diseases and toxicants."<sup>2</sup> The negative effects of increased sedimentation on brook trout populations in particular are well documented in the scientific literature.<sup>3</sup> Controlling sediment is critical to maintaining habitat for brook trout and other coldwater species.

Trout Unlimited is working extensively throughout the Bay watershed to restore trout habitat and reduce pollution. In addition to numerous grassroots-level projects, TU currently operates three watershed-scale conservation efforts in the Chesapeake Bay watershed: instream and riparian habitat restoration in cooperation with agricultural landowners in the Potomac and Shenandoah River headwaters, and restoration of streams impaired by acid mine drainage in Pennsylvania's West Branch Susquehanna watershed. For example, in West Virginia's Potomac River headwaters Trout Unlimited has worked with the Fish and Wildlife Service and private landowners to install between 100,000 and 120,000 feet of livestock exclusion fencing annually over the past several years, helping to stabilize streambanks and filter pollutants.

These restoration efforts have resulted in real, on-the-ground improvements to habitat and water quality. Such restoration work is an essential component to bringing back healthy trout populations in headwater streams and to meeting pollution reduction goals under the TMDL. The TMDL will help concentrate attention and funding on successful partnerships so that Trout Unlimited and others can dramatically increase the amount of restoration work we accomplish in the coming years.

Given the scale of the challenge, however, restoration alone will not succeed. Robust restoration efforts must be accompanied by effective regulations that reduce pollution levels and prevent new sources from undermining hard-earned water quality gains. The TMDL will result in an increased level of focus and accountability that helps spur water quality and habitat improvements throughout the Bay watershed.

Trout Unlimited supports the TMDL and looks forward to working with state, federal and private partners in the Chesapeake Bay headwater areas to achieve pollution reduction goals.

Sincerely,

Keith Curley

<sup>&</sup>lt;sup>2</sup> Jeffrey W. Lilly, *Regulatory Violations in the Mining Industry: Mountaintop Removal Mine Valley Fills Violate the Federal Clean Water Act.* 100 W. VA. L. REV. 691, 728-29. (1998) (summarizing a telephone interview with Dan Ramsey, Environmental Contaminants Specialist, U.S. Fish and Wildlife Service).

<sup>&</sup>lt;sup>3</sup> See, e.g., S.M. Reid, S. Stoklosar, S. Metikosh, & J. Evans, Effectiveness of isolated pipeline crossing techniques to mitigate sediment impacts on brook trout streams, WATER QUALITY RESEARCH JOURNAL OF CANADA. Vol. 37, No. 2, pp. 473-88 (2002) (noting that stream populations of brook trout are sensitive to sediment-caused changes to habitat, including increased embeddedness of bed material); J.P. Hakala & K.J. Hartman, Drought effect on stream morphology and brook trout populations in forested headwater streams, HYDROBIOLOGIA. Vol. 515, pp. 203-13